

State of Louisiana Department of Natural Resources Coastal Engineering Division

2006/2007 Annual Inspection Report

for

SEDIMENT TRAPPING AT THE JAWS PROJECT (TV-15)

State Project Number TV-15 Priority Project List 9

June 22, 2007 Vermilion Parish

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I. Introduction

The Sediment Trapping at the Jaws Project (State Project No. TV-15) is located in the Teche/Vermilion Basin in the northeastern corner of West Cote Blanche Bay in St. Mary Parish near the intersection of the Charenton Drainage Canal and the bay. This area is known as "The Jaws". (See Appendix A).

The Sediment Trapping at the Jaws Project was authorized by Section 303(a) of Title III Public Law 101-646, the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) enacted on November 29, 1990 as amended and approved on the ninth Priority Project List. The Sediment Trapping at the Jaws Project has a twenty year (20 year) economic life, which began in December 2004.

II. Inspection Purpose and Procedures

The purpose of the annual inspection of the Sediment Trapping at the Jaws Project (T/V-15) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, LDNR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan, 2005). The annual inspection report also contains a summary of maintenance projects which were completed since completion of constructed project features and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since completion of the Sediment Trapping at the Jaws Project are outlined in Section IV.

An inspection of the Sediment Trapping at the Jaws Project (TV-15) was held on June 22, 2007 under clear skies and hot temperatures. In attendance were Stan Aucoin and Garrett Broussard from DNR Lafayette; John Foret from NOAA Fisheries; and Dale Garber from NRCS (for other inspections). The annual inspection began at the northern most terrace.

The field inspection included a visual inspection of randomly selected areas of the project site. Staff gauge readings, when available, and existing temporary benchmarks were used to determine approximate elevations of water and terraces. Photographs were taken (see Appendix B) and Field Inspection notes were completed in the field to record measurements and deficiencies (see Appendix D).

III. Project Description and History

Construction of the Gulf Intracoastal Waterway (GIWW) in the 1920's provided a connection between the Atchafalaya River and the project area resulting in major hydrologic changes. As

the holding capacity of the Atchafalaya Basin decreased, more and more freshwater was forced down the river's main channel, Wax Lake Outlet, and the GIWW. The result was what was once considered to be brackish marsh converted to fresh.

Sediment laden water from the Atchafalaya River gets to the project area via the GIWW as well as through West Cote Blanche Bay from the Atchafalaya Delta and Wax Lake outlet during strong southeasterly wind events. Construction of the terraces provides protection to the northern shoreline of West Cote Blanche Bay by reducing fetch and turbidity. The channels used to construct the terraces provide a conduit directing sediment rich waters from the GIWW into the project area building additional acres of marsh.

The principal project features include:

- ~38,700 linear feet of earthen terraces in "The Jaws"
- ~38,500 vegetative plantings

IV. Summary of Past Operation and Maintenance Projects

General Maintenance: Below is a summary of completed maintenance projects and operation tasks performed since December 2004, the construction completion date of the Sediment Trapping at the Jaws Project.

No maintenance has been required on this project.

<u>Structure Operations:</u> There are no active operations associated with this project.

V. Inspection Results

Earthen Terraces/Vegetation

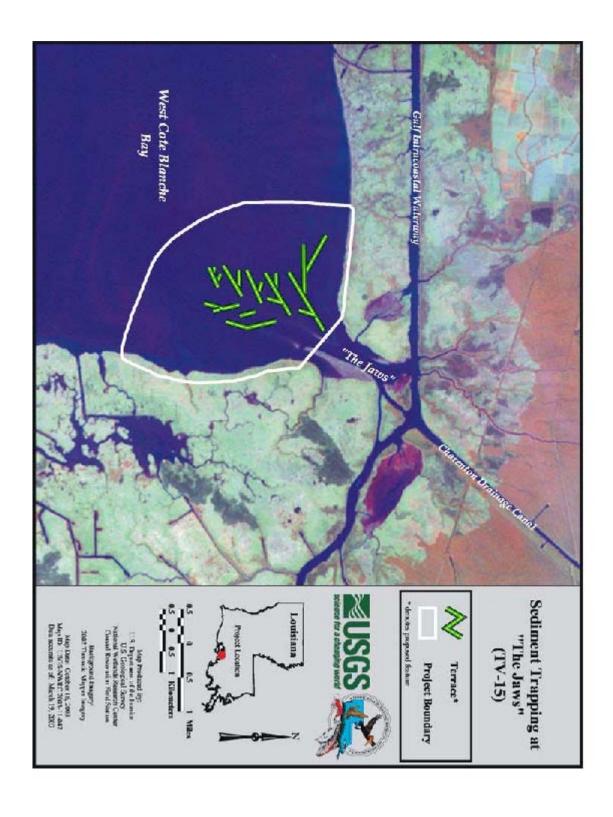
The terraces appear to be in excellent post-construction condition. Overall settlement has been no where near what pre-construction geotechnical investigations had warned. Warning signs were all in place and stable. Vegetation has completely recovered from the effects of Hurricane Rita and has expanded as much as 40 feet on some terraces. Submerged aquatic vegetation between the terraces has also completely recovered. No need for any maintenance at this time. (Photos: Appendix B, Photos 1–4)

VI. Conclusions and Recommendations

The Sediment Trapping at the Jaws Project is excellent condition and functioning as designed. There is no need for any maintenance at this time.

Appendix A

Project Features Map



Appendix B

Photographs



Photo 1—typical terrace and warning sign



Photo 2—vegetated terrace and submerged aquatics



Photo 3—view of terraces from the south



Photo 4—view of terraces showing accretion/vegetation between terraces

Appendix C

Three Year Budget Projection

SEDIMENT TRAPPING AT THE JAWS/ TV15 / PPL 6 Three-Year Operations & Maintenance Budgets 07/01/2007 - 06/30/10

Project Manager	O & M Manager	Federal Sponsor	Prepared By				
Stan Aucoin Stan Aucoin		N/A	Stan Aucoin				
	2007/2008	2008/2009	2009/2010				
Maintenance Inspection	\$ 5,407.00	\$ 5,570.00	\$ 5,737.00				
Structure Operation							
Administration		\$ -	\$ -				
Maintenance/Rehabilitation							
07/08 Description:							
E&D							
Construction							
Construction Oversight							
Sub Total - Maint. And Rehab							
08/09 Description							
·							
50 D		Φ.					
E&D		\$ -					
Construction		\$ -					
Construction Oversight		<u> </u>					
	Sub Total - Maint. And Rehab.	\$ -					
09/10 Description:							
E&D			\$ -				
Construction			\$ -				
Construction Oversight			\$ -				
		Sub Total - Maint. And Rehab.	\$ -				
	2007/2008	2008/2009	2009/2010				
Total O&M Budgets	\$ 5,407.00	\$ 5,570.00	\$ 5,737.00				
O PM Budget (2 vs Total)							
O &M Budget (3 yr Tot Unexpended O & M Bu	\$ 16,714.00 \$ 247,624.41						
Remaining O & M Bud	\$ 230,910.41						

Appendix D

Field Inspection Form

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: TV-15 Sediment Trapping at the Jaws Date of Inspection: June 22, 2007

Inspector(s): Stan Aucoin & Garrett Broussard (LDNR)
John Foret (NMFS), Dale Garber (NRCS) (For other inspections)
Water Level

Structure Description: Terraces/Vegetation

Weather Conditions: Clear and hot Type of Inspection: Annual

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
	N/A				
Steel Bulkhead					
/ Caps					
Steel Grating	N/A				
0					
Stop Logs	N/A				
Handiiia	N/A				
Hardware	IN/A				
Timber Piles	N/A				
Tilliber Tiles	19/75				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
·					
Vegetation	Good				
Signage	Good			1	
/Supports					
D: D ((11))					
Rip Rap (fill)	N/A				
Earthen				0004	Tanana and an alitina Na anadad
Eartnen Embankment	Excellent			2,3 & 4	Terraces are in good condition. No repairs needed.
(terraces)	Excellent				
(lerraces)					

What are the conditions of the existing levees? Are there any noticeable breaches? Settlement of rock plugs and rock weirs? Position of stoplogs at the time of the inspection? Are there any signs of vandalism?

Appendix E

Locations to be Monitored